

CLAIMS

1. A holographic recording medium comprising a recording layer, the recording layer being irradiated with an object beam and a reference beam of the same recording wavelength so that information is recorded in the form of interference fringes, wherein:

the recording layer is covered with a photosensitive protective layer; the recording layer is formed so that photosensitivity of its material to incident light falls in the vicinity of the recording wavelength from shorter wavelengths to longer wavelengths; and the photosensitive protective layer is formed so that its light transmittance to the incident light falls in the vicinity of the recording wavelength from longer wavelengths to shorter wavelengths.

2. The holographic recording medium according to claim 1, wherein

the photosensitive protective layer is set so that it absorbs or reflects light at least in a range of shorter wavelengths out of ranges of longer wavelengths and shorter wavelengths than a certain range of wavelengths across the recording wavelength, and transmits light in the certain range of wavelengths selectively.

3. The holographic recording medium according to claim 1 or 2, wherein

the photosensitive protective layer is made of two

substrates for sandwiching the recording layer, and an end seal for covering peripheral ends of the recording layer between the two substrates and peripheral ends of the two substrates.

5 4. The holographic recording medium according to claim 1 or 2, wherein

the photosensitive protective layer is made of two substrates for sandwiching the recording layer, and an end seal for covering peripheral ends of the recording layer
10 between the two substrates.

5. The holographic recording medium according to claim 1 or 2, wherein:

the recording layer is sandwiched between two substrates; and the photosensitive protective layer is formed to cover the
15 recording layer and the two substrates.

6. The holographic recording medium according to claim 3, wherein

the photosensitive protective layer has an adhesive function when attaching the recording layer to the substrates,
20 and has a light-absorbing material dispersed into its material, the light-absorbing material absorbing or reflecting light at least in the range of shorter wavelengths out of the ranges of longer wavelengths and shorter wavelengths than the certain range of wavelengths across the recording wavelength.

25 7. The holographic recording medium according to claim 4,

wherein

the photosensitive protective layer has an adhesive function when attaching the recording layer to the substrates, and has a light-absorbing material dispersed into its material, the light-absorbing material absorbing or reflecting light at least in the range of shorter wavelengths out of the ranges of longer wavelengths and shorter wavelengths than the certain range of wavelengths across the recording wavelength.

8. The holographic recording medium according to claim 3,

10 wherein

the two substrates are made of optical glass plates formed by separating, into an optical glass material, a light-absorbing material for absorbing or reflecting light at least in the range of shorter wavelengths out of the ranges of longer wavelengths and shorter wavelengths than the certain range of wavelengths across the recording wavelength, and transmitting light in the certain range of wavelengths selectively.

9. The holographic recording medium according to claim 4,

20 wherein

the two substrates are made of optical glass plates formed by separating, into an optical glass material, a light-absorbing material for absorbing or reflecting light at least in the range of shorter wavelengths out of the ranges of longer wavelengths and shorter wavelengths than the certain

range of wavelengths across the recording wavelength, and transmitting light in the certain range of wavelengths selectively.